

AMENDMENTS TO THE CLAIMS

The listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims

Claims 1 - 41 (Canceled)

42. (New) A backlight unit, comprising:

a plurality of straight tube fluorescent lamps arranged substantially parallel to one another in the longitudinal direction of the fluorescent lamps; and

driving means arranged on one-end sides of the plural fluorescent lamps for driving the plural of fluorescent lamps by applying a high voltage to one-end terminals of the plural fluorescent lamps, wherein

brightness compensation means are provided for compensating for uneven brightness in the longitudinal direction of the plural fluorescent lamps by decreasing the brightness of the fluorescent lamps on one end side or increasing the brightness of the fluorescent lamps on the other end side or controlling brightness in combination from the both end sides.

43. (New) The backlight unit of claim 43 further comprising:

a reflection portion adapted to emit the light from the plural fluorescent lamps in a specific direction, wherein

the brightness compensation means are provided on the reflection portion and control the reflectance of the reflection portion to compensate for uneven brightness of the plural fluorescent lamps.

44. (New) The backlight unit of claim 43, wherein

the brightness compensation means have regions with relatively high and low reflectances in the reflection portion and take advantage of the difference in reflectance to compensate for uneven brightness of the plural fluorescent lamps.

45. (New) The backlight unit of claim 43, wherein

the brightness compensation means have a reflectance gradient that causes the reflectance of the reflection portion to decline gradually or in stages and take advantage of the reflectance gradient to reduce the brightness in the longitudinal direction of the plural fluorescent lamps on one end portion side near to the driving means.

46. (New) The backlight unit of claim 44 or 45, wherein

the brightness compensation means have a reflectance gradient that causes the reflectance of the reflection portion to increase gradually or in stages and take advantage of the reflectance gradient to increase the brightness in the longitudinal direction of the plural fluorescent lamps on the other end portion side far from the driving means.

47. (New) The backlight unit of claim 43, wherein

the brightness compensation means are a dot pattern provided on the reflection portion and take advantage of the dot pattern to control the reflectance of the reflection portion.

48. (New) The backlight unit of claim 47, wherein

the reflectance of the reflection portion provided with the dot pattern is controlled by one or a plurality of the reflectance of the group of small dots making up the dot pattern, the dot density, the dot shape, and the dot color.

49. (New) The backlight unit of claim 42 further comprising:

a reflection portion adapted to emit the light from the plural fluorescent lamps in a specific direction, wherein

the reflection portion is made up of first and second reflection layers having given optical reflectance and transmittance levels,

as the brightness compensation means, the reflection portion is configured with a first region having the first and second reflection layers stacked one above another in the direction of incidence of light and a second region made up only of the first reflection layer, and

the reflectance of the reflection portion is controlled using the first region with a relatively high reflectance and the second region with a reflectance lower than that of the first region.

50. (New) The backlight unit of claim 42, wherein

the brightness compensation means are provided on a glass tube of the plural fluorescent lamps and control the transmittance of the glass tube to compensate for uneven brightness of the plural fluorescent lamps.

51. (New) The backlight unit of claim 42, further comprising:

a diffusion portion adapted to diffuse the light from the plural fluorescent lamps, wherein

the brightness compensation means provided on the diffusion portion control the transmittance of the diffusion portion to compensate for uneven brightness of the plural fluorescent lamps.

52. (New) The backlight unit of claim 50 or 51, wherein

the brightness compensation means have regions with relatively high and low transmittances in the glass tube or the diffusion portion and take advantage of the difference in the transmittance to compensate for uneven brightness of the plural fluorescent lamps.

53. (New) The backlight unit of claim 52, wherein

the brightness compensation means have a transmittance gradient that causes the transmittance to decline gradually or in stages and take advantage of the transmittance gradient to reduce the brightness in the longitudinal direction of the plural fluorescent lamps on one end portion side near to the driving means.

54. (New) The backlight unit of claim 52, wherein

the brightness compensation means have a transmittance gradient that causes the transmittance to increase gradually or in stages and take advantage of the transmittance gradient to increase the brightness in the longitudinal direction of the plural fluorescent lamps on the other end portion side far from the driving means.

55. (New) The backlight unit of claim 50, wherein

the brightness compensation means are a dot pattern provided on the glass tube of the plural fluorescent lamps or the diffusion portion and take advantage of the dot pattern to control the transmittance.

56. (New) The backlight unit of claim 55, wherein

the transmittance of the glass tube or the diffusion portion provided with the dot pattern is controlled by one or a plurality of the reflectance of the group of small dots making up the dot pattern, the dot density, the dot shape, and the dot color.

57. (New) The backlight unit of claim 42, wherein

the brightness compensation means are provided on the glass tube of the plural fluorescent lamps and control surface brightness of the glass tube to compensate for uneven brightness of the plural fluorescent lamps.

58. (New) The backlight unit of claim 57, wherein

the thickness of the fluorescent substance formed inside the glass tube of the plural fluorescent lamps as the brightness compensation means is changed correspondingly with the longitudinal position of the plural fluorescent lamps to compensate for uneven brightness in the longitudinal direction of the plural fluorescent lamps.

59. (New) A liquid crystal display device comprising:

the backlight unit of claim 42; and

a liquid crystal panel illuminated by the backlight unit.

60. (New) A liquid crystal display device including the backlight unit of claim 42 and a liquid crystal panel illuminated by the backlight unit, comprising:

a gradation conversion portion for carrying out a given gradation conversion process of input image data; and

a control portion for switching between gradation conversion characteristics of the gradation conversion portion based on a synchronizing signal of the input image data, wherein

the control portion switches from one gradation conversion characteristic to another in the gradation conversion portion based on a synchronizing signal of the input image data, and wherein the control portion switches from one gradation conversion characteristic to another in the gradation conversion portion correspondingly with unevenness in brightness of the plural fluorescent lamps based

on the screen position to display the image data to compensate for uneven brightness of the plural fluorescent lamps.

61. (New). A liquid crystal display device comprising:
the backlight unit of claim 42; and
a crystal panel illuminated by the backlight unit, wherein
the crystal panel is configured to have an aperture ratio that changes correspondingly with the display screen position, and
the aperture ratio is changed to compensate for uneven brightness of the plural fluorescent lamps.